Charles Johnson

Bill Shanks

Bill Sandusky

Kate Kelly

Bob Shaw

Phil W

Ed St Germaine

Sandy Morgan

Pete

Randy Smidt

Mary

Terry

Wilson

Beth S.

Mark D from Johnson Controls

O+M working group January 28, 2010

Ab: What does O+M really mean? How you use your facilities, how you get the most efficient use out of your facilities. Care and feeding on the other side – most efficient, extended life, reduced maintenance cost. PNNL put together the guidance (one of most popular downloads on FEMP website).

E4 audits – training, awareness when looking at O+M opportunities, site visits. Looking specifically @ ESPCs - extensive capital intensive operations. Also popular program EMR – contractor in VA. Put together commissioning e-learning tool for FEMP website.

Need to tell a better story about O+M, how to use it. TEAM initiative made O+M dormant for awhile but now Richard Kidd sees this as an important opportunity. Anywhere from 10-30% savings can come from good O+M/retro commissioning. Kidd agreed this working group is a good idea. Today serves as a brainstorming session to form a good, solid O+M program. Think about what we can effectively as a group, what established priorities should be, what kind of partnerships are out there, and how much time people can spend on this.

[introducing Leslie]

We will be brainstorming on both the group as well as O+M program. Will also be discussing partnerships.

Working Group as a whole

Round 1

- (Sandy) Preventative, warranty, schedule maintenances. Trying to get each site to have an O+M plan so for this group would like a model policy with some ideas in it, with model O+M plans based on that for agencies to reference.
- (Ed, EMR) Sites have been requesting no cost-low cost measures HOWEVER these sites are small so they're not getting the same type of engineering support and funding as large sites such as NASA yet still have to meet the same goals set by President. ESPCs don't want to touch these small sites therefore don't have same access to funding (\$5million and below). Recommends something like "mini ESPC" or small scale third party finance to accomplish this.
 - Lack of out of the box thinking to create these energy savings systems.
 Nobody is taking the time to speak to occupants/maintenance folks to find out where issues/problems are. Need to educate the staff
- (Beth) Persistence of savings. Based on EO13514, O+M best way to accomplish GHG goals and anything we're implementing should maintain that in mind.
- (Phil) Unique buildings and laboratories build a capability, not just knowledge but also raise appreciation for the people who carry out this work. They are the first to go with budget cuts. Results in no transfer of knowledge. Too many conflicting responsibilities running around dealing with how hot a room is but also responsible for a lot more.
- (Pete) developing guidance on common problems and their solutions that people in the field can use. Self O+M audit guide.
 - Also research done on O+M cost vs. condition index
- (Randy) Used to have a good O+M program but it is dormant now. Army has a lot of budget pressure on installations funding so would like to see cost savings measures. Use/maximize existing resources/personnel to deal with budget cuts. Army seeing great lack of qualified people to work on this.
- (Mary) Really like the idea of O+M self audit guide. Many facilities are small and have 1 guy doing all the work. Something like a calculator plug in and see how much the site can get in savings. Training would also be helpful
- (Terry) Consulted with ORNL operations to provide comments today. Operations side seems to only come out when the need is urgent so we need preventative maintenance in advance. Model documents would be a good idea.
 - Trying to get legislative changes. FEMP's cross agency groups who influence policy Davis-Beacon (limits work then requiring you to bid it out.) especially when categorized as construction. Any project over \$2500 a formal design package must go out and bid etc. Would like this to reflect 2010 dollars instead of 1931 when it was written.
- (Wilson) Seen as an additional duty in AF so there's a lack of continuity within AF. Training would be helpful but also would like help on developing their energy manager program. Just had a whole bunch of energy building audits but there is concern about lack of continuity across all the building audits some guys use one set of guidelines while others use something different and it's not consistent.

- (Charles Johnson) tool kit or 'cook book' with reference material saying specifically what costs are
- (Bill Shanks) gross consumption is so good that they can't show much progress. This would normally be a good thing however if they're held at the same standards as everyone else, it is increasingly hard to realize. DVA is starting to look at measures that don't make the best sense over time because they need to show improvement.
- (Bill Sandusky) who are the people involved w/ O+M? Facilities folks and occupants so a good program would have all those people working together. Need to have training in various forms: hands on, knowledge, real life scenario. Figure out how to be successful w/ whatever we have.
 - o Planning, planning. Preventative maintenance is also very important. Need hard data to show and support the story.
- (Mark) Speaking from an industry perspective. He can make natural comparisons being on the outside based on seeing what the agencies are doing. Feels the/a role FEMP can plan is unification/unified approach for all government to get them on the same page for O+M. Need to see O+M and conservation as more the same discipline rather than different. This is an opportunity for FEMP to integrate the two. Payoffs have been tremendous at sites where this marriage has already occurred.
 - o For the human side: engagement, involved of energy consumers is key if you want to squeeze out the last of savings.

Ab's wrap up: O+M tends to get shoved off to the side b/c we're not talking about 'wiz bang' technology or buying shiny new equipment. He's in the 'mosh pit' with everyone else competing. What is the true perspective of O+M? Need to get the word out, get the story told.

AF- Estimates of savings are based on assumptions rather than hard data. AF currently does not have hard metering data.

Leslie recap and questions

Take the list, prioritize and come back w/ a list and suggestions on the program. We really need to have case studies (Bill Sandusky)

We will meet in about another month – March 2. Then on out meet every 2 months or so. Ab wants to establish a charter; with possible subgroups. Also will include some items to come out of it.

Leslie might want to see other working groups that people are involved with so we can combine when appropriate.

Round 2 Partnering Opportunities and additional Priorities

- (Wilson) A military sub group would be nice.
- (Terry) See above
- (Mary) Echoing what Wilson said in reference to metering at what point does a facilities guy react? How to interpret metering data.

- (Randy) Resources/guidance/policy brought forth from each agency to share. Include what works as well as what doesn't work.
- (Mark) Centers of expertise go to the people who are doing it to gain most knowledge
- (Pete) Personnel: lack O+M trouble shooting skills. Benchmarking capability. Reliability maintenance is too expensive that's why no one does it offer predictive training. Address the definition of O+M: currently includes grounds and janitorial. Detailed best practices guide: what they're doing right as well as wrong drill down to specific room.
- (Phil) There is a laboratory-specific working group on the same O+M/Metering topic so would be happy to be a subgroup. Dashboard PI. Labs are unique because they are the most heavily used by users and these users can change the safety of the lab overnight. →Labs21 energy benchmarking tool (by LBNL). Should reference and use as a tool.
- (Beth) How can we use the meter data to give us metrics for budget? How do we figure budget based on that? What's important? A short subgroup might be good on budget
- (Ed) Controls training! Not getting to the root problems; too much focus on immediate/temporary fix. Need to incentivize performance based contractors/contracts along with agency. Currently the folks on the inside don't have any incentives at all.
- (Sandy) Guidance on what to do with \$ what to do w/ budget and how to prioritize it. Utilize software systems for O+M. Also want a recognition program something to make them feel good about doing it a poster, certificate etc. "Hiring the wrong guy for the job is like having two good men gone" = need guidance on what skills to look for in candidates.
- (Charles) export information